# TAYLOR M. OKONEK

tokonek@uw.edu \$ https://taylorokonek.github.io/ Department of Biostatistics, University of Washington, 3980 15th Avenue NE, Box 351617, Seattle, WA 98195

#### **EDUCATION**

# University of Washington, Seattle, WA

September 2018 - Present

Ph.D., Biostatistics

Advisor: Jon Wakefield, Ph.D.

Dissertation: Statistical Methods for Official Statistics and Mortality Estimation

## Saint Olaf College, Northfield, MN

September 2014 - May 2018

B.A., Mathemathics and Religion Concentration in Statistics

Summa cum laude

## RESEARCH AND CONSULTING EXPERINECE

## Research Assistant

University of Washington, Department of Biostatistics

Supervisor: Jon Wakefield, Ph.D.

June 2019 - Present

University of Washington, Department of Environmental and Occupational Health Sciences

Supervisors: Lianne Sheppard, Ph.D. and Joel Kaufman, Ph.D.

September 2018 - June 2019

# Saint Olaf College Center for Interdisciplinary Research

Statistical Consultant

Supervisors: Louis Epstein, Ph.D. and Sharon Lane-Getaz, Ph.D.

September 2016 - May 2018

Matthew Wright, Ph.D. and Matthew Richey, Ph.D.

#### Saint Olaf College Collaborative Undergraduate Research and Inquiry Program

Student Summer Researcher

Supervisors: Sharon Lane-Getaz, Ph.D.  $\,$ 

May 2016 - August 2016

# TEACHING EXPERIENCE

# Instructor

University of Washington, Department of Biostatistics

• BIOST 311: Regression Methods in the Health Sciences

March 2022 - June 2022

Co-taught with Charlie Wolock

#### Teaching Assistant

University of Washington, Department of Biostatistics

• BIOST 310: Biostatistics for the Health Sciences

September 2020 - December 2020

• Summer Institute in Statistics and Modeling in Infectious Diseases

July 2021, July 2022

Spatial Statistics in Epidemiology and Public Health

• Course preparation: Maintenance of R package rigr

June 2021 - September 2021

• BIOST 555: Statistical Methods for Spatial Epidemiology

Janury 2022 - March 2022

Saint Olaf College, Department of Mathematics and Statistics

February 2015 - May 2018

- STAT 212: Statistics for the Sciences
- STAT 322: Statistical Theory
- MATH 244: Real Analysis
- MATH 262: Probability Theory

## **Undergraduate Student Mentor**

University of Washington, Department of Statistics

January 2021 - June 2021

- Directed Reading Program Mentor: Topics in Biostatistics
- Directed Reading Program Mentor: Disease Mapping

Fred Hutchinson Cancer Research Center

June 2021 - September 2021

• Summer Internship Mentor

#### INDUSTRY EXPERIENCE

#### **Data Science Intern**

WindLogics, St. Paul, MN

May 2017 - August 2017

## AWARDS AND HONORS

## University of Washington

ARCS Foundation Fellow

Biostatistics, Epidemiologic, and Bioinformatic Training in Environmental Health Training Grant

#### Saint Olaf College

Phi Beta Kappa Honors Society

Blue Key Honor Society

Pi Mu Epsilon Honor Society

Theta Alpha Kappa Honor Society

Bellows Scholarship

President's Scholarship

## PROFESSIONAL SERVICE

# Manuscript Reviewer

Journal of Official Statistics

Journal of Survey Statistics and Methodology

# UNIVERSITY SERVICE

# University of Washington, Department of Biostatistics

Member - Biostatistics Equity, Diversity, and Inclusion Committee September 2018 - September 2021

Member - Statistics Education Reading Group

September 2019 - Present

Member - Biostatistics Activities and Events Squad

September 2019 - September 2022

Member - Admissions Committee

September 2021 - April 2022

#### Saint Olaf College

Member - TRIO McNair Scholars Program

January 2016 - May 2018

#### **PUBLICATIONS**

#### **PUBSLISHED**

- 1. Eaton, J., ..., Okonek, T.M., ..., Shiraishi, R.W. (2021). Naomi: A New Modelling Tool for Estimating HIV Epidemic Indicators at the District Level in Sub-Saharan Africa. *Journal of the International AIDS Society*, 24.
- 2. Wakefield, J., **Okonek, T.M.**, Pedersen, J. (2020). Small Area Estimation for Disease Prevalence Mapping. *International Statistical Review*, 88, 2.
- 3. Han, S.M., **Okonek, T.M.**, Yadav, N., Zheng, X. (2020). Distributions of Matching Distances in Topological Data Analysis. *SIAM Undergraduate Research Online*, 13.
- 4. Epstein, L.K., **Okonek, T.M.**, Perkins, A.E. (2019). Mind the Gap: Inclusive Pedagogies for Diverse Classrooms. *Journal of Music History Pedagogy*, 9, 2.

#### SUBMITTED

1. **Okonek, T.M.**, Wakefield, J. (2022). A Computationally Efficient Approach to Fully Bayesian Benchmarking.

#### SOFTWARE

stbench	Fully Bayesian Benchmarking for spatio-temporal models
rigr	Regression, inference, and general data analysis tools for R

#### RESEARCH PRESENTATIONS

- 1. "A Computationally Efficient Approach to Fully Bayesian Benchmarking." WNAR, Virtual. June, 2022. { Contributed Presentation }
- 2. "A Computationally Efficient Approach to Fully Bayesian Benchmarking." Biostatistics Student Seminar Series, UW Department of Biostatistics, Seattle, WA. November, 2021. { Contributed Presentation }
- 3. "Assessing National PM10 Predictions: From 1990 to 2016." BEBTEH Student Research Day, UW, Seattle, WA. April, 2019. { Poster Session }
- 4. "Distributions of Matching Distances in Topological Data Analysis." Underrepresented Students in Topology and Algebra Research Symposium, Portland, OR. April, 2018. { Poster Session }
- 5. "The Music History Game: Assessing Learning through Play." National Conferences on Undergraduate Research, Memphis, TN. April, 2017. { Poster Session }
- 6. "Teacher Professional Learning Communities and Student Achievement." Saint Olaf College Collaborative Undergraduate Research and Inquiry Program, Northfield, MN. August, 2016. { Poster Session }

## PROFESSIONAL AFFILIATIONS

American Statistical Association

#### TECHNICAL SKILLS

Programming Languages and Statistical Packages

R, C++, Python, Mathematica,
Shiny, Tidyverse

Other Applications

ETEX, Linux/Unix, Git